

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF HAWAII

In the Matter of )

PUBLIC UTILITIES COMMISSION )

Docket No. 2008-0274

Instituting a Proceeding to Investigate )  
Implementing a Decoupling Mechanism )  
for Hawaiian Electric Company, Inc., and )  
Hawaii Electric Light Company, Inc., and )  
Maui Electric Company, Limited. )  
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HAIKU DESIGN AND ANALYSIS

OPENING STATEMENT OF POSITION

AND

CERTIFICATE OF SERVICE

FILED  
2009 MAR 30 A 11:49  
PUBLIC UTILITIES  
COMMISSION

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_____	)	

**HAIKU DESIGN AND ANALYSIS**

**OPENING STATEMENT OF POSITION**

Carl Freedman, dba Haiku Design and Analysis (HDA) respectfully offers its Opening Statement of Position (SOP) regarding the implementation a decoupling mechanism for the Hawaiian Electric Company, Inc., Maui Electric Company Ltd. and the Hawaii Electric Light Company, Ltd. (collectively: HECO Companies).

**TERMINOLOGY**

(1) In order to clarify and distinguish several types of mechanisms considered in this “decoupling” docket, HDA refers distinctly to several types of mechanisms proposed in this docket:

- A “decoupling mechanism” is the specific mechanism designed to adjust revenues to make utility earnings indifferent to changes in sales or demand volume in periods between rate cases.

- A “revenue adjustment mechanism” (RAM) or “recoupling mechanism” is a mechanism to adjust target net revenues (usually intended to cover fixed costs) to account for non-sales or demand factors in periods between rate cases.
- A “revenue balancing account” (RBA) is a cost accounting, adjustment and reconciliation mechanism used to implement one or both of the above mechanisms.

## **GENERAL POSITIONS**

(2) HDA supports the implementation of a decoupling mechanism for the HECO Companies that effectively insulates the utilities’ earnings from fluctuations in sales volumes in years between rate cases. Effective decoupling would provide several benefits. Of primary importance to HDA in this docket, a decoupling mechanism would decrease existing disincentives for the utilities to embrace programs (by the utilities or other parties) that reduce energy consumption including energy efficiency programs and customer sited renewable generation.

(3) HDA has questions and concerns regarding the accuracy of some components of HECO’s proposed decoupling mechanism that, hopefully, can be answered or constructively resolved in the course of ongoing discussion between the parties. In particular HDA is examining the relationship between the proposed decoupling mechanisms and (a) the treatment of fuel and purchased energy costs and how these are combined or differentiated from fixed costs in base rates, (b) changes in actual fuel and purchased energy costs resulting from changes in sales volume, (c) actual revenue streams collected by various tariffs and surcharges and (d) adjustments and reconciliations made by other

existing and proposed mechanisms. Although these interactions are not simple or straightforward HDA believes the parties have similar objectives regarding crafting a decoupling mechanism and it should be possible to ultimately agree regarding a workable treatment.

(4) HDA does not take a position at this time regarding the specific attributes of the RAM mechanism proposed by HECO. HDA does have several concerns to be investigated further as the docket proceeds.

- The proposed RAM mechanism would methodically increase rates in years between rate cases which would have a negative impact on customers with no clearly identified customer benefits.
- The proposed RAM would substantially reduce cost recovery risks to the HECO Companies but offers no corresponding benefit to customers.
- The proposed RAM includes several features to adjust rates to compensate the HECO Companies for increased costs between rate cases but does not seem to include features to account for or encourage productivity, cost control or other factors that should decrease costs between rate cases.
- Although the purpose and justification of the proposed RAM is framed as a necessary element to support the objectives of the HCEI and October 2008 Agreement (to encourage energy efficiency and renewable generation) there are no provisions to provide incentives or ensure that the HECO Companies will diligently implement these objectives.



(5) HDA generally supports the customer protection features proposed by the Consumer Advocate but not have a position on specific features at this time.

#### **SPECIFIC PROPOSALS BY HDA**

HDA offers two specific proposals in its SOP, including a proposed decoupling mechanism and a proposal to convert the existing ECAC to a full fuel cost pass through adjustment mechanism. HDA may offer further specific proposals in the course of the docket.

(6) **HDA Example Mechanism:** HDA described and proposed a decoupling mechanism (HDA example mechanism) in this docket in response to question number 2 of the *Appendix 2: Questions to the Parties* in the National Regulatory Research Institute (NRRI) scoping paper titled "*Decoupling*" *Utility Profits from Sales: Design Issues and Options for the Hawaii Public Utilities Commission*.

HDA reaffirms its offer of its decoupling mechanism proposal as described in HDA's response to question number 2 of the NRRI scoping paper cited above (Response #2) and incorporates Response #2 and the corresponding Attachments 1, 2 and 3 to its response in this SOP by reference.

As stated in Response #2, the HDA example mechanism is proposed in order to provide at least one mechanism in this proceeding that (a) is simple enough and is feasible to administer and (b) is designed exclusively to effectively decouple earnings from sales volume while preserving, rather than substantially enhancing, the value of the revenue stream to the utility between rate cases.<sup>1</sup> HDA also offers the mechanism to provoke

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<sup>1</sup> The HDA example decoupling mechanism neither presumes nor is intended to provide completely accurate recovery of the utility's actual fixed costs that are incurred in the intervals between rate cases. The

discussion of several important details regarding decoupling mechanism design including the treatment of average versus marginal fuel and purchased energy costs.

HDA notes that there are some aspects of its proposal that will need to be adjusted to account for interactions between the decoupling mechanism and other existing and proposed rate design mechanisms, principally HECO's Energy Cost Adjustment Clause (ECAC) mechanism. As noted in HDA's response to question number 24 in *HDA's Responses to Information Requests to the Parties Transmitted by the Commission on March 5, 2009* (filed simultaneously with this SOP), HDA is examining the interaction between the ECAC and HECO's proposed decoupling mechanism. It is clear that these interactions may require modifications to the HDA example mechanism as well.

HDA also notes that a revenue balancing account (RBA) approach could be used to implement a decoupling mechanism identical in function to the HDA example mechanism (which uses direct price adjustment accounting). The RBA approach may have some advantages in terms of accounting for interactions with other rate design mechanisms and reconciliation accounting. An RBA approach could also be used to implement the HDA example mechanism RAM which uses an index of number of customers as a proxy for utility system growth to escalate target recovery of fixed costs between rate cases.

**(7) Convert the existing ECAC to a straight full cost pass through for fuel and purchased energy expenses:** The existing ECAC mechanism is a fuel price adjustment

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existing tariffs do not accurately recover utility fixed costs between rate cases. The proposed decoupling mechanism does not attempt to "fix" or improve all aspects of the accuracy of the existing regulatory compact in this respect but rather attempts to preserve the approximate magnitude of the value of the revenue stream.

mechanism for utility generation and a straight full cost pass through for purchased energy. This mechanism is unique to the HECO Companies. The ECAC incorporates a fixed system heat rate for utility generation and determines fuel cost adjustments based on monthly weighted fuel price (times the heat rate) rather than basing adjustments on actual fuel expenses. Quarterly and annual reconciliations true up the ECAC revenues based on actual purchased energy expenses but not directly on actual utility generation expenses. The long standing perceived advantage of the ECAC over a straight cost pass through is the incentive the ECAC provides to the utility to operate its generation system to maximize thermodynamic efficiency.

HDA argues here, for purposes of consideration by the Commission and other parties, that it is time to retire the ECAC mechanism and replace it with a straight full cost pass through. HDA offers the following arguments:

(a) A straight cost pass through would considerably simplify administration of the fuel adjustments and the decoupling mechanisms. First, it is very simple compared to the existing ECAC. Second, it would simplify the administration of a decoupling mechanism. In fact, if there is going to be a revenue balancing account (RBA) for the decoupling mechanism, implementing a straight pass through could be done as part of the same set of calculations, adjustments and reconciliations. One set of lines in the RBA would match and adjust collected revenues for fixed costs to target revenues for fixed costs (the HECO proposed decoupling method). A second set of lines would match and adjust collected revenues for fuel and purchased energy to actual fuel and purchased energy expenses (a



straight full cost pass through).

(b) A straight pass through is consistent with the objectives of the RAM generally: reduction of risk and uncertainty in full recovery of utility expenses.

(c) The existing ECAC incentives to the utility to operate its system efficiently from a thermodynamic standpoint (to minimize system heat rate) provides some convoluted incentives regarding commitment of purchased power generation units versus commitment of company generation units.<sup>2</sup> With substantial amounts of new renewable generation being added to the utility system, a straight fuel cost pass through would “decouple” utility earnings from resource commitment (and curtailment) decisions. The utility should not be at financial risk based on resource commitment and curtailment decisions that should be made according to policies (maximization of renewable generation) that conflict with the most efficient thermodynamic operation of the utilities’ own generation units.

(d) Similarly, the existing ECAC provides an incentive for the utilities to minimize spinning operation reserve capacity and, in effect, penalizes utility earnings for providing additional operation reserve capacity. This is significant because maximizing the incorporation of intermittent renewable resources requires providing increased operating reserve capacity. The utilities should not be financially penalized for providing ample operation reserves in order to accommodate intermittent renewable generation. A straight fuel cost pass through would decouple utility earnings from operation reserve capacity decisions.

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<sup>2</sup> Commitment refers to the decisions made by a utility dispatcher to start generation units or take units off-line in order to maintain sufficient operating generation units to meet instant generation requirements.



(e) Since the HECO Companies currently dispatch generation resources using AGC controls that are based on minimizing economic costs, regulators have a simple verifiable way to determine that resources are being operated economically. The efficiency incentive in the existing ECAC is not necessary to ensure economic dispatch of system resources.<sup>3</sup>

HDA maintains that the proposal to amend the ECAC is appropriate and does not unduly broaden the issues in this docket. HDA proposes conversion of the ECAC to a straight cost pass through mechanism in this docket (rather than in a rate case, for example) for several reasons:

- Converting the ECAC to a straight cost pass through effectively decouples utility earnings from several resource commitment, curtailment and system operating reserve protocols that should be based on policies (to promote purchased renewable generation) that, as explained above, are potentially at odds with existing ECAC incentives.
- The ECAC and other existing and proposed mechanisms and surcharges are interrelated, need to be considered collectively in designing an effective decoupling mechanism and should be designed to work together effectively and efficiently from an administrative standpoint.
- The existing ECAC complicates the effective implementation of a decoupling mechanism. Alteration of the ECAC is potential solution to decoupling issues.

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<sup>3</sup> Note that the utilities actually do not really dispatch resources directly according to ECAC revenue maximization in any case since resources are dispatched based on minimizing fuel expense, not based on minimizing BTU consumption.

- A straight pass through of fuel costs could be an integral part of the accounting used in an RBA decoupling mechanism.
- Finally, HDA would probably not be allowed to intervene in a HECO rate case and no other docket is open to consider changes to the ECAC.

## CONCLUSION

HDA is not strongly attached to any of the positions identified above. These positions are offered for consideration by the parties and to provoke meaningful discussion. HDA looks forward to working with the parties in the context of the technical workshop to resolve a workable decoupling mechanism. HDA does not now take a position on the specific elements of the proposed RAM mechanism.

Dated: March 28, 2009; Haiku, Hawaii

Signed: CARL FREEDMAN  
Carl Freedman

## CERTIFICATE OF SERVICE

I hereby certify that I have this date served a copy of the foregoing HAIKU  
DESIGN AND ANALYSIS OPENING STATEMENT OF POSITION AND  
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Dated: March 28, 2009; Haiku, Hawaii

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